Amendments to the Claims

Please amend Claims 1 and 17 to read as follows.

1. (Currently Amended) A power converting apparatus having a non-insulated converter and a non-insulated inverter to convert direct current power inputted from a power supply to alternating current power and to supply the alternating current power to a commercial power system which is grounded, said apparatus further comprising:

a detector for detecting a ground fault of the power supply; and

a controller for varying an input voltage of the converter and/or an intermediate voltage between the converter and the inverter so as to control a potential to ground of the power supply.

2. (Original) The apparatus according to claim 1, wherein said controller executes the control to make a magnitude of the potential to ground at an arbitrary position in the power supply have a value not less than a predetermined value.

3. (Original) The apparatus according to claim 1, wherein when the ground fault is detected by said detector, said controller records information related to the ground fault in a memory.

4. (Original) The apparatus according to claim 3, wherein the information recorded in the memory includes at least the input voltage or intermediate voltage at the time of ground fault detection.

5. (Original) The apparatus according to claim 1, wherein said detector detects the ground fault at least at two detection levels, and when the ground fault is detected, said controller records information related to the ground fault in a memory for each detection level.

6. (Original) The apparatus according to claim 5, wherein the information recorded in the memory includes at least the input voltage or intermediate voltage at the time of ground fault detection.

7. (Original) The apparatus according to claim 5, wherein when the ground fault is detected, said controller predicts a ground fault position and/or a ground fault resistance value on the basis of the input voltage and intermediate voltage for each detection level and records a prediction result in the memory.

8. (Original) The apparatus according to claim 1, wherein said detector detects the ground fault at least at two detection levels, and upon detecting the ground fault, outputs a ground current value, and when the ground fault is detected, said controller records information related to the ground fault in a memory for each detection level.

9. (Original) The apparatus according to claim 8, wherein the information recorded in the memory includes at least the input voltage, intermediate voltage, and ground current value at the time of ground fault detection.

10. (Original) The apparatus according to claim 8, wherein when the ground fault is detected, said controller calculates a ground fault position and/or a ground fault resistance value on the basis of the input voltage, intermediate voltage, and ground current value for each detection level and records a calculation result in the memory.

11. (Original) The apparatus according to claim 1, wherein said controller executes the control within a predetermined time T1.

12. (Original) The apparatus according to claim 11, wherein after the control is executed, said controller does not execute the control until a predetermined time T2 shorter than the predetermined time T1 has elapsed.

13. (Original) The apparatus according to claim 1, wherein said controller executes the control when the direct current power input from the power supply has a value not more than a predetermined value.

14. (Original) The apparatus according to claim 1, wherein when the ground fault is detected, said controller stops power supply to the commercial power

system, resumes power supply after a predetermined time, and executes the control to confirm whether a ground fault is detected once or a plurality of number of times.

15. (Original) The apparatus according to claim 1, wherein said power supply comprises a plurality of direct current power supply units connected in series.

16. (Original) The apparatus according to claim 1, wherein said power supply is a solar battery.

17. (Currently Amended) A solar power generation apparatus comprising:

a power supply for supplying direct current power; and

a power converting apparatus having a non-insulated converter and a non-insulated inverter to convert direct current power inputted from said power supply to alternating current power and to supply the alternating current power to a commercial power system which is grounded, said power converting apparatus further comprising:

a detector for detecting a ground fault of said power supply; and

a controller for varying an input voltage of the converter and/or an intermediate voltage between the converter and the inverter so as to control a potential to ground of said power supply ~~the power converting apparatus of claim 1~~.

18. (Original) The apparatus according to claim 17, wherein said power supply comprises a plurality of direct current power supply units connected in series.

19. (Original) The apparatus according to claim 17, wherein said power supply is a solar battery.

20. (Original) A control method of a power converting apparatus which has a non-insulated converter and a non-insulated inverter to convert the direct current power inputted from a power supply to alternating current power and to supply the alternating current power to a commercial power system which is grounded, said method comprising the steps of:

varying an input voltage of the converter and/or an intermediate voltage between the converter and the inverter so as to control a potential to ground of the power supply; and

detecting a ground fault of the power supply.

21. (Original) A computer program product comprising a computer readable medium having a computer program code, for a control method of a power converting apparatus which has a non-insulated converter and a non-insulated inverter to convert direct current power inputted from a power supply to alternating current power and to supply the alternating current power to a commercial power system which is grounded, comprising process procedure code for:

varying an input voltage of the converter and/or an intermediate voltage between the converter and the inverter so as to control a potential to ground of the power supply; and

detecting a ground fault of the power supply.